DERMATOLOGY

BASIC THERAPEUTIC PRINCIPLES and MANAGEMENT

361st STATION HOSPITAL

TOKYO, JAPAN

COLONEL J. T. B. STRODE, M. C.

Commanding Officer

DERMATOLOGY SECTION

CAPTAIN E. P. SCHOCH, JR., M. C.

Chief of Section

T 29 Nov '50

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This guide is intended to review a few of the basic dermatological principles and to give one workable example of the many methods of managing each of the ten most common skin diseases.

Caution is to be stressed constantly to avoid over treatment which is the most common complication necessitating hospitalization of dermatological conditions.

DERMATOLOGY
Basic Therapeutic Principles and Management

Introduction

In no specialty is the range of possible remedies greater than in dermatology. The technique of external local treatment constitutes the most potent weapon in the management of most cutaneous diseases.

Topical dermatologic therapy depends not only on the chemical action, but also the physical properties of the agents applied. For this reason, the choice of the vehicle and the form of medication -- even the mere manner of application and removal -- are as important as the selection and quantity of active ingredients and will often decide the success or failure of topic therapy.

In each individual case, the choice of both remedies and vehicles depends largely on the appearance and the course of the dermatoses. In this manual, we will attempt to discuss therapy that can be carried out with just the basic preparations available and with the standard formulary. The medications will be discussed as to the types of dermatological agents, the pharmacology of topical drugs, special preparations and plans of treatment for the common skin diseases encountered in everyday practice.

TYPES OF DERMATOLOGICAL AGENTS

Cleansing Measures

It is often necessary to cleanse the lesions which are to be treated. In cleansing irritable conditions such as oozing and crusting eczemas, impetigo contagiosa, and other pyodermas, and in removing the residues of local medication, mild nonirritating methods are to be used.

Useful measures are gentle sopping or bathing with solution of hydrogen peroxide or boric acid, application of wet dressings, or the use of oil (mineral or olive) to remove pastes and ointments.

Mechanical removal of crusts and scales may be necessary and is often more readily accomplished after the use of one of the aforementioned measures.

After each cleansing procedure, the selected topical remedy is applied.

Cleansing of torpid thickened and chronic lesions can be effected by more vigorous methods such as scrubbing with a brush, hot water and soap (tincture of green soap), soapless detergents, macerating and occlusive dressings, or direct painting with strong keratolytic agents.

BATHS

Baths affect even the normal skin. Many youthful individuals, whose skins tend to be greasy and to have a greater supply of natural oils than the skins of infants or of the aged, may benefit from frequent hot baths with plenty of soap and scrubbing; yet such baths may be

harmful to individuals with dry skin, such as is common in infancy, early childhood, and in old age. There is no doubt that certain cases of excessive dryness of the skin and of itching are made worse by bathing and may sometimes be attributed to the excessive use of hot baths and soap.

It is equally true that skin eruptions such as eczemas of the hand, monilia infections, and other irritable or widespread dermatoses are often aggravated by alkalis and particularly by soap and water. Nevertheless, therapeutic baths often constitute the best methods for applying mild medication to the entire skin surface.

A. Cleansing Baths

This form is used to remove accumulated dirt, debris, crusts, scales, and the adherent remains of previous medications.

If soap is not irritating, one can use plain white soap. Soaps that are made from tallow and corn oil are generally less irritating than those of coconut oil, olive oil, whale oil, or sesame oil. Soap must be completely rinsed off. The skin is dried by patting rather than rubbing. It is advantageous to apply topical remedies immediately after baths.

B. Medicated Baths

These baths achieve soothing effects, antipruritic action, decongestive and inflammatory and specific effects of active medicinal

ingredients including antiparasitic, antiseborrheic, antieczematous and macerating and softening. As a rule, COOL baths are more serviceable.

1. Corn starch and sodium bicarbonate baths are used for soothing action in generalized and itching dermatoses. For corn starch baths, stir ½ to 1 lb. of refined corn starch into a tubful of water. (Starchs are made soluble through hydrolysis, for example, by boiling.) One-fourth to one-half lbs. of baking soda is adequate for each bath.

2. Potassium permanganate baths are effective in exudative, vesicular and bullous eruptions (pemphigus, generalized eczema), pyodermas and superficially infected dermatoses. This bath acts as a disinfectant and by its oxidizing effect, helps to dry exuding areas and acts as a deodorant in foul-smelling surface affections. Potassium permanganate in a dilution of 1-9,000 to 1-12,000 is used.

3. Sulfur baths are an adjunct antiparasitic treatment of pyodermas and of certain seborrheic conditions. Sulfur is a mild fungistatic, antiseborrheic, keratolytic parasiticide. Sulfur is also an irritant or stimulant to skin and a general disinfectant. Liquor calcis sulfuratae NF (Vleminckx's solution) 150 to 200 cc. per tub.

4. Tar baths are antipruritic in cases of generalized itching dermatoses and in generalized eczemas and psoriasis. Liquor carbonis detergens 120 cc. added to each tub.

The individual response is the determining factor both as to the measures used and as to the manner and frequency of use. The urban adult usually washes his hands too often. It is often advantageous to reduce exposure to soap and water whenever the hands are affected by irritated, eczematous or other dermatoses. In contrast to this excessive use of soap and water on the hands, many women never wash their faces. They are misled into avoiding soap and water by the advertising campaigns of those who have "creams," "skin food," "deep cleanser," etc., to sell and by the belief that their skins are too dry. However, in the majority of such cases of too dry skin in young women, the patients are suffering from a tallowy form of seborrheic scaling and not from actual dryness. The surface of the skin will be found to be greasy, not dry, and if the seborrheic scales are pressed between layers of cigarette paper, grease spots are produced.

Daily soap and hot water scrubbing may at first irritate such skins but usually improve the underlying condition.

It is rare to find an otherwise normal young person whose skin will not tolerate soap. In older persons, the tendency to dryness of the skin is not uncommon, and many middle aged and older men, and especially women, must actually dispense with the use of soap. In these cases, other methods must be adopted such as cleansing with oil (mineral or olive oil) or the use of soap substitutes such as lowila or dermolate.

Wet Dressings

Wet dressings are one of the most useful forms of dermatologic therapy. It is one of the best means of cleansing the skin of adherent crusts and debris. It helps maintain drainage of infected areas such as furuncles and superficial ulcerations. It is an effective vehicle in local application of heat. A keratolytic action is manifested by macerating the skin surface. Wet dressings prevent rapid change of temperature at the skin surface -- hence are often good analgesics and antipruritics. By relief of superficial inflammation, wet dressings have a soothing action. Wet dressings tend to open blisters and bring medication to the base of ulcerating areas.

1. Physiological saline solution
2. Burow's solution (1:10 - 20)
3. Potassium permanganate 1:9,000
4. Boric acid (saturated solution)

Powders

Powders are most conveniently used in the treatment of intertrigenous areas (interspaces between the toes, in the groin or beneath pendulous breasts.) Powders protect from the irritation of maceration and friction and also exert a cooling effect.

Powdering of the interdigital spaces and the liberal use of powder in the shoes, socks and stockings is one of the best measures in hyperhidroses and in the prophylaxis of certain superficial fungus infections including "athlete's feet."

Lotions

Lotions are liquid or semiliquid preparations usually having water or alcohol as a base and containing ingredients in solution or suspension or both. They are of greater use in subacute or chronic conditions, where there is not too much weeping (otherwise it acts as a cement.) Lotions are advantageous because of the ease of application, anti-inflammatory action and they allow passage of a certain amount of secretion. Lotions are disadvantageous because they are drying and not penetrating.

It must be remembered that active ingredients which penetrate beyond the first few millimeters represent potential danger because of possible systemic and toxic effects. This must be kept in mind when treating large areas or when used for babies and children.

Shake lotions do not penetrate as well as ointments, but this relatively superficial action is not always disadvantageous. Many dermatoses, e.g., eczema, seborrheic dermatitis, affect primarily the uppermost layers of the skin, and in these conditions, medication should be confined, if possible, to the superficial tissues.

e.g., Basic Lotion

Zinc Oxide	20.0
Talc	20.0
Bentonite	5.0
Water qs.	

Emulsions or Liniments

These preparations are oily or fatty substances emulsified and suspended in an aqueous or other liquid or aqueous solution suspended in an oily medium. Emulsions or liniments are a transition between lotions and ointments. The principal use from these preparations lies in the treatment of patients confined to bed. Large areas can be treated with painting medicated emulsions. Usually these preparations are eventually quite drying -- probably due to the alkaline effect (soap).

e.g., Calamine liniment, N. F.

Ointments

Ointments consist of various fats or oils into which oil soluble medicaments are dissolved or suspended. Fatty substances which constitute bases of most salves and ointments may be divided into two groups: (1) animal and vegetable, (2) mineral greases and oils. Mineral greases are preferred because they do not become rancid and have a greater resistance to growth of bacteria. Animal fats hold more water so that water and most medicaments which can be dissolved in water can be incorporated. Ointments have many properties. They have the capacity of maceration. They bring medication into more intimate contact with the surface of a lesion. The emolient and lubricant property serves to soften the surface of the skin as well as the crusts, scales and detritus on the skin surface so that medicaments reach tissues beneath. Ointments, greases and oils enable the use of many therapeutic agents which are fat or oil soluble but which are not water soluble.

Ointments are disadvantageous because of their general messiness and difficulty of proper application, especially in the case of extensive dermatoses and in ambulatory patients. Ointments are of great use in dry, scaly, thickened and deep conditions. When the scales and crusts are removed, penetration is achieved.

Ointments are contra-indicated in oozing areas, infected lesions where drainage is required, and in hairy areas.

e.g., Petrolatum

Water Miscible Bases

These preparations are water soluble and permit more rapid release of agents incorporated.

e.g., Ointment Base (emulsion base), USP

PHARMACOLOGY OF TOPICAL AGENTS

1. Antipruritics

In general, pruritus is relieved by the following methods:

a. Substitution of some other sensation for itching

(1) Heat or cold

(2) Phenol ½ - 1 %

(3) Menthol ¼ - ½ %

(4) Camphor ¼ - ½ %

(5) Thymol ½ - 1 %

b. Anesthesia of sensory nerves

(1) Benzocaine 1 %

(2) Nupercaine 1 %

c. Protection of skin from external influences.

(1) Wet compress

2. Keratoplastics

These are agents which tend to produce an increase in the keratinization of the horny layer. Agents which have a mild stimulating effect in general tend to stimulate horn formation if repeatedly applied to an area over a sufficient period.

e.g., Salicylic acid 1 - 3 %

Tars 1 - 5 %

3. Keratolytics

Agents which tend to remove the horny layer or reduce its thickness are keratolytics. Removal of the horny layer can be achieved by any form of superficial damage severe enough to cause destruction or rapid exfoliation -- thus caustics in macerating dressings act as keratolytics. Keratolysis produced by medicaments is usually the result of withdrawal of fluid -- leading to the subsequent throwing off of the loosened, dried-out horny mass; or of maceration of the horny lamellae and their imbibition of fluid and subsequent throwing off.

e.g., Resorcinol 1-5 %
Salicylic acid 5-40 %

4. Anti-eczematous Agents

Remedies used in treating eczematous, eczematoid processes and pruritic superficial inflammatory eruptions more or less resembling eczematoid dermatitis (eczematoid eruptions). Some of the agents relieve itching and thus prevent scratching, some act by keratolysis, some act by cleansing, some by antiphlogistic and cooling effect, some by simple protection, some by ultimate protection achieved through keratoplastic effect and increase in thickness and resistance of the horny layer.

A. Acute Cases

(1) Soothe with wet dressings first--
   a. Boric acid solution
   b. Burow's solution (1:10-20)
   c. Physiologic saline
   d. Potassium permanganate solution 1:9,000

(2) Antipruritics--menthol and phenol in basic lotion when areas are not weeping excessively.

B. Subacute to Chronic Cases

(1) Lassar's paste
(2) Tars
    a. Liquor carbonis detergens (L.C.D.)
    b. Ichthyol
    c. Crude coal tar

5. Antiseptics

Agents which treat and guard against infection are antiseptics.

A. Potassium permanganate 1:9,000
B. Ammoniated mercury 2-10%
C. Quinolor
D. Vioform
E. Tyrothricin
F. Furacin
G. Penicillin and sulfonamides are not recommended for topical application because of the danger of sensitization of other tissues of the body.

6. Antimycotics

These preparations are used in the treatment of superficial fungus infections.

A. Potassium permanganate 1:9,000 solution
B. Castellani's paint
C. Compound tar ointment (pragmatar)
D. Undecenylenic acid ointment
E. Gentian violet 1% solution

7. Anti-seborrheics

These preparations are used in the treatment of seborrhea and seborrheic dermatitis.

A. Sulfur and salicylic acid

(1) Sal - sulfur ointment
(2) Compound tar ointment

8. Antiparasitics

A. Scabies

(1) Sulfur (5-20% ointment)
(2) Benzyl benzoate (25% emulsion)

B. Pediculosis

(1) DDT (10% powder or 2% solution)

SPECIAL PREPARATIONS

These preparations are commonly used in the practice of dermatology:

1. Vleminckx' solution (liquor calcis sulfuratae), (for acne)

2. 1-2-3 ointment:

	gm or cc
Burow's solution	10
Lanolin	20
Lassar's	30

3. Lotio alba:

Zinc sulfate	4%
Potassium sulfuratae	4%
Water qs.	

4. Scalp lotion #1 (for dark hair)

Resorcinol	4.0
Salicylic acid	4.0
Mercury bichloride	0.2
Glycerin	2.0
Water	
Alcohol (95%) aa, to make	240.0

5. Scalp lotion #2 (for blond hair)

Chloral hydrate	4.0
Salicylic acid	4.0
Mercury bichloride	0.2
Glycerin	2.0
Alcohol (95%)	
Water aa, to make	240.0

If hair is too dry, you can replace the glycerin with 0.5 to 4% castor oil in both scalp lotions.

6. 3% vioform cream

7. Compound tar ointment

8. Sal sulfur ointment:

	gm or cc.
Salicylic acid	3%
Sulfur	6%
Emulsion base qs	

9. Sulfur resorcin lotion:

Resorcinol	2%
Sulfur	4%
Basic lotion qs	

10. Burow's solution:

Lead acetate	150
Aluminum sulfate	87
Water qs to 1000	

11. Carron oil:

Olive oil
Lime water aa

12. Boric acid ointment

13. Silver nitrate: 1-800 as a wet dressing; 5-10%, granulation tissue and pyodermia; 50%, strong cautery treatment of warts.

14. Trichloracetic acid (cautery)

15. Phenol (cautery)

16. Scabies ointment:

Balsam Peru	5%
Sulfur	10%
Castor oil	10%
Lanolin	
Petrolatum aa qs	

17. 20% olive oil in emulsion base (for asteatosis).

18. Chrysarobin 1-5% ointment (for psoriasis)

19. Psoriasis ointment:

Crude coal tar	3%
Ammoniated mercury	3%
Salicylic acid	3%
Emulsion base qs	

20. 20% podophyllin in alcohol (for verruca acuminata).

21. Whitfield's Solution

Acid salicylic	3%
Acid Benzoic	6%
Alcohol (70%) q.s.	

BASIC MANAGEMENT OF THE TEN MOST COMMON SKIN DISEASES

I. ACNE VULGARIS

1. Instruction of patient regarding diet and skin hygiene (printed directions).

2. Lotio Alba nightly, to be washed off in morning.

3. Alcohol wiping after soap and water washing 2-3 times daily.

4. Anti-seborrheic scalp lotion (#1 for brunettes; #2 for blonds) nightly.

5. Brewer's yeast--9 to 12 tablets daily

For more severe cases:

6. Crushed solid CO2 - acetone slush with 10% sulfur applied in clinic weekly.

7. Complicated cases--hospitalize.

(Instructions for patient)

ACNE

ACNE is a very common skin disease especially in young men.

In the face, neck, chest, and back, are many small glands which keep the skin oily. in ACNE these become overactive, fill up and get plugged. This causes large pores, oily nose, blackheads, whiteheads and pimples.

ACNE is not catching and is not dangerous. ACNE is not due to sexual continence, masterbation, or sexual excess. It is made worse by infection, dirt and grease.

YOUR SKIN WILL GET BETTER

You must follow all the suggestions given and take care of your skin EVERY DAY. You cannot miss one day in this care. Some ACNE needs more treatment. Some of these are helped by X-ray. Nc X-ray is given until ordinary treatment has been tried. No X-ray treatment is given overseas. Penicillin will not cure ACNE.

1. Take a warm shower every day.

2. Wash face gently with warm water and white soap FIVE times every day. Take your time. Use your hands and do not use rough cloth or brush. Rinse with cold water.

3. Put rubbing Alcohol on face after washing each time.

4. Put lotion on face every night. The skin will get rough and dry but this causes a peeling which opens the plugged glands.

5. Do not use any cream or grease on face.

6. Shampoo hair every morning.

7. Rub scalp lotion into the hair every night.

8. Do not use any vaseline or oil on the hair.

9. Eat a low fat diet. Avoid CHOCOLATE, NUTS, PORK, CHEESE, ICE CREAM, BUTTER, MILK, SAUSAGE, FRIED FOODS, COD LIVER OIL, PASTRIES, CAKES. Limit SUGAR, POTATOES, BREAD, RICE, MACARONI, SPAGHETTI.

10. KEEP HANDS OFF FACE. Do not squeeze pimples or try to get out blackheads.

11. Do not wear oily or greasy clothes next to the skin.

12. Get eight hours sleep. Exercise. Have regular bowel habits. Drink six glasses of water each day.

This treatment outlined by skin specialists has helped many who have had ACNE. It can help you, but only if you believe your face will get better and only if you believe your Medical Officer can help you. You must follow all the suggestions EVERY DAY.

II A. DERMATITIS VENENATA

1. Acute (weepy, erythematous, vesicular, exudative, "hot".)

a. Wet Dressings (compresses or soaks)
(1) Burow's solution (1:20)
(2) Physiological saline
(3) Boric acid solution (sat'd)
(4) KMNO4 1:9000 (pyodermic)

2. Subacute (Less erythematous, vesiculation subsiding, no exudation, "warm".)

a. Lotions
(1) Basic lotion
b. Liniments
(1) Calamine Liniment
c. Pastes
(1) Lassar's paste

3. Chronic (no erythema, scaling, no exudation, thickening, "cold").

a. Ointments
(1) Petrolatum
(2) Boric acid ointment

Persistent chronic dermatitis should be treated as an eczema.

4. Antihistamics if markedly pruritic or evidence of "id" reaction:

a. PBZ 50 mg q.i.d.

5. No soap to involved areas (see methods of cleansing.)

II B ECZEMA

1. Acute, subacute, early chronic stages treated like dermatitis venenata.

2. Chronic (or persistent subacute)

   a. Ichthyol 3%
      Lassar's paste qs.

   or

   b. Vioform cream 3% (if pustular)

   then

   c. Crude coal tar 1-5%
      Lassar's paste
      (or emulsion base) qs.

3. Vesicular eczema of hands and feet.

   a. Burow's 1:20 or saline soaks t.i.d.

   b. 3% LCD (liquor carbonis detergens) in emulsion base (EMB) t.i.d., daytime

   c. Lassar's paste hs (remove with mineral oil in a.m.)

   d. PBZ 50 mg q.i.d.

DIRECTIONS FOR WET DRESSINGS

Dilute _____with _____of water in enamelware, porcelain or glass dish or pan. (Not in copper or aluminum.) The water should have been previously boiled and allowed to cool. (May use distilled water.) The mixture should be at a comfortable temperature - if it is too cold, warm it up by heating; or if too warm, add a few pieces of ice.

The pack is made of 8 to 12 layers of cheesecloth and larger than the area you are treating. Soak the pack in the mixture and wring out to a point of being soppy, but not running.

Evaporation is desirable, you may place waterproof material (oil cloth or rubberized sheet) under the pack to protect the bedding or furniture, but do not enclose the entire pack in the material.

Every hour completely remove the pack, rewet it by immersion and replace it. (Pouring solution over or under the pack is not satisfactory.) If the pack becomes dry before an hour is up, rewet it earlier.

Use the mixed solution until it shows sediment or becomes cloudy, then make a fresh batch again.

Fix the pack preferably by overlapping and fastening with large safety pins or tie straps. Do not wrap it with bandage.

III DERMATOPHYTOSIS

1. Acute

a. $KMNO_4$ 1:9000 (compresses or soaks)

2. Subacute

a. $KMNO_4$ 1:9000 soaks t.i.d. or normal saline soaks t.i.d.

b. ½ strength sal sulfur ointment hs.

3. Chronic

a. Painting with Whitfield's solution b.i.d.

b. Abundant foot powder t.i.d.

c. Saline soaks hs.

d. Full strength sal sulfur ointment or compound tar ointment hs.

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e. Fungicidal ointment is helpful in mild cases and in prophylaxis.

IV PYODERMA

1. Acute

   a. $KMnO_4$ 1:9000 (compresses or soaks)

2. Subacute to chronic

   a. Vioform cream 3% or ammoniated mercury 3% q.i.d.

3. If extensive:

   a. Penicillin aqueous 300,000 units daily or b.i.d. x 5-7 days.

4. Special types

   a. Sycosis Vulgaris
      (1) General measures as for all pyodermas
      (2) Mild: sulfur-resorcin lotion t.i.d.
      (3) Severe or resistent: quinolor ointment (watch for sensitivity-may use ½ strength.)
      (4) Shave daily with new blades
      (5) Sterilize razor blades with alcohol
      (6) Wipe skin with alcohol after shaving
      (7) Manual epilation

   b. Impetigo Contagiosa
      (1) Same general measures
      (2) Careful removal of crusts before each application of ointment
      (3) Prevent community use of clothing, towels, etc.

c. Folliculitis Simplex

(1) Sulfur-resorcin lotion t.i.d.
(2) Avoid oils and grease to skin

V SEBORRHEIC DERMATITIS

1. Acute

   a. Burow's solution 1:20 or normal saline (compresses or soaks.)

2. Subacute to chronic

   a. Scalp:
      (1) Sal sulfur ointment b.i.d. or compound tar ointment
      (2) Shampoo every 2 days when subsiding
      (3) Scalp lotions (#1 brunettes; #2 blondes) to scalp daily; plus sal sulfur ointment weekly

   b. Glabrous skin:
      (1) ½ strength sal sulfur ointment b.i.d. or
      (2) Sulfur resorcin lotion b.i.d.

3. Restrict fat and carbohydrates in diet

4. Vitamin B complex orally

VI PSORIASIS

1. Acute

   a. Basic lotion

   b. Calamine liniment

   c. Boric acid ointment

2. Subacute to chronic

   a. 2% crude coal tar in petrolatum b.i.d.

   b. Daily suberythema ultraviolet irradiation (after removal of salve.)

   c. Calcium gluconate 10.0 cc IV three times a week.

   d. Autohemotherapy 10.0 cc three times a week.

   e. Restrict fat in diet.

3. Chronic resistant cases

   a. Psoriasis ointment:
      (1) Ammoniated mercury 3%
      (2) Acid salicylic 3%
      (3) Crude coal tar 3%
      (4) EMB qs.

   b. Ultraviolet, as above.

VII SCABIES

1. Preparation:

a. Benzyl benzoate emulsion 25% 120.00 cc bottle.

2. Directions:

a. Shower, scrub off all crusts and pay special attention to areas of skin with maximal involvement.

b. After shower, while still wet, apply first coat of Benzyl Benzoate, covering every area of body from neck down, paying special attention to areas where lesions are most numerous. Allow lotion to dry on skin for 10 minutes. USE NO TOWEL and reapply medicine in same manner from neck down, allowing medicine to dry and remain on.

c. Wait 24 hours - no bathing or showering.

d. Reapply lotion from neck down - 1 coat.

e. Allow lotion to remain on for 24 hours.

f. Shower, change all clothing, bed clothing, sheets and blankets. Treatment finished. Have all worn clothing cleaned or washed. Itching may continue for several days to several weeks, but as long as no new sores or bumps appear, you may con-

sider yourself cured. If you think you are not cured, see your medical officer before repeating treatment.

3. Caution against repeated applications because of danger of contact dermatitis from benzyl benzoate.

VIII PITYRIASIS ROSEA

1. Avoid hot soapy baths.

2. Sulfur-resorcin lotion t.i.d.

3. Suberythema ultraviolet irradiation two or three times a week.

IX HYPERHIDROSIS

1. Wash feet at least twice daily.

2. Change socks twice daily.

3. Abundant use of foot powder three or four times daily.

4. Soak feet in Burow's solution 1:10 (Domeboro tablets--4 to quart of water) daily.

5. Tannic acid 5%
   Glycerine 5%
   Alcohol (95%)
   Water aa qs.
   Sig. Painted on feet b.i.d.

6. Occasionally sedation and neuropsychiatric evaluation.

X PEDICULOSIS PUBIS

1. Spray once with DDT aerosol bomb, or

2. DDT 2% in 12½% benzyl benzoate emulsion (one application.) May repeat in one or two days if necessary. May also be used in the scalp, or

3. 10% DDT powder daily x 5 days.

SUMMARY

1. Make a diagnosis or have the diagnosis made as early as possible. Diagnosis may be necessary for proper treatment.

2. Properly selected topical measures are often the best forms of treatment in cases of uncertain or unknown etiology or diagnosis, as well as in the period before determination of the exact diagnosis and in many cases, with established diagnosis and etiology.

3. The choice of topical measures is often largely determined by the presenting morphologic characteristics, by the stage, and by the site of the eruption. The physician must, therefore, be able to recognize whether a dermatosis is acute or chronic, dry or exudative, papular or vesicular, infected or not infected, irritable or torpid, superficial or deep, hyperkeratotic or not, spreading or remaining fixed, growing or regressing, improving or not, of exogenous or of endogenous origin, destructive or non-destructive (atrophy or scarring), malignant or benign.

4. Topical remedies are then chosen to produce specific effects according to the characteristics of the lesions (e.g., soothing, protective, absorbent drying, macerating, keratolytic, penetrating, reducing or destructive effects.) The following hints should prove useful:

a. Use few remedies and know everything that is to be known about them. Adopt a few--say eight--standard external medicaments; for example, two forms of wet dressings (one soothing and one soothing and parasiticidal); two

shake lotions (one soothing and antipruritic and one antiparasitic and keratolytic); two pastes (one soothing and one antiparasiticidal); two ointments (one soothing and softening and antieczematous and one penetrating, keratolytic and antiparasitic.) Master these eight and you will have greater prospects of success and for less chance of making costly mistakes than if you use 80 different remedies without complete knowledge of their properties, incompatibilities and contraindications.

b. Bear in mind the possibility that a remedy may harm rather than help. When in doubt, and in all acute and irritable dermatosis, begin with the mildest and most indifferent agents. When in doubt and using a new medicament, observe the effects on a small site before proceeding to the treatment of larger areas.

c. Frequent observations on the effects of medicaments may be necessary not only to prevent ill effects but to select, adjust and modify the treatment.

d. Do not change to a new remedy as long as the dermatosis is improving satisfactorily under the old one. Do not complicate the therapy by useless modification of, or additions to the remedies prescribed.

5. When a remedy disagrees with a patient, stop its use at once and try to find the cause of the disagreement. In many patients, allergic eczematous hypersensitivity is the basis of the irritation. When this is the case, consider each of the ingredients and their combinations, as well as the measures and substances used in

the application and removal of the prescribed medication. Gritty salves, pastes, or emulsions, improperly homogenized or unevenly dissolved or dispersed chemicals may be sources of irritation. Therefore, the practitioner of external therapy must have some knowledge of the art of dispensing and of the appearance feel, odor, and other characteristics of every remedy he prescribes.

6. The action of topical remedies will often depend on the mode of application and removal. The physician must, therefore, give adequate instructions to each patient and must often also demonstrate exactly the correct manner of use, application and removal of each preparation.

In addition to following these 6 rules, other practical difficulties must be considered and overcome. For example, social or occupational duties, lack of funds, and facilities or still more commonly, lack of time, may prevent the patient's proper use of an agent which, on purely medical grounds, would be the remedy of first choice. In such cases, it will be necessary to substitute a more easily used remedy.

Moreover, the physician must repeatedly check upon the manner in which the remedies are being used. He should at each successive visit carefully examine the treated areas and closely question the patient as to the manner of use and removal of the remedies. With some patients, no amount of painstaking instruction will achieve the correct and conscientious use of topical remedies. In such instances, hospitalize the patient.

Despite the difficulties which topical treatment may present, no effort can be spared in the endeavor to accomplish its proper selection and execution. For the abandonment of correct topical treatment means the surrender of what is often the most powerful weapon of present dermatologic management.